# RESEARCH, DEVELOPMENT & TECHNOLOGY TRANSFER QUARTERLY PROGRESS REPORT

Wisconsin Department of Transportation DT1241 02/2011

#### **INSTRUCTIONS:**

Research project investigators and/or project managers should complete a quarterly progress report (QPR) for each calendar quarter during which the projects are active.

☐ F	DOT research program Policy research Other	category:   Wiscons  Pooled f	ım	Report period year: 2014  Quarter 1 (Jan 1 – Mar 31)  Quarter 2 (Apr 1 – Jun 30)  Quarter 3 (Jul 1 – Sep 30)  Quarter 4 (Oct 1 – Dec 31)						
Proj	ect title: Performance of I	Pile Supported Si	ign Strı	ıctures						
Proj	ect investigator: Andrew	Boeckmann	Phone	e: (573) 884-7613		E-mail: boeckmanna@missouri.edu				
Adm	ninistrative contact: Ange	la Pakes	Phone	e: (608) 890-4966		E-mail: apakes@sustainability.wisc.edu				
Wisl	DOT contact: Peg Lafky		Phone	e: (608) 266-3663		E-mail: Marguerite.Lafky@dot.wi.gov				
Wisl	DOT project ID: 0092-14	-02	Other	project ID:		Project start date: 8/8/2013				
Orig	inal end date: 2/8/2015		Current end date: 2/8/2015			Number of extensions: 0				
	iect schedule status:   On schedule	☐ On revis	sed sch	edule	ad of so	chedule	☐ Behind schedule			
Proj	ect budget status:									
	Total Expenditu Project Budget Current Qu			Total Expenditures		% Funds Expended	% Work Completed			
	\$99,999,00 \$15,091,0		Ω	\$26,676,65		270%	250%			

### Project description:

Perform a field load test and numerical modeling of two pile groups to investigate load transfer for sign foundations.

Progress this quarter (includes meetings, work plan status, contract status, significant progress, etc.):

Engineering plans for the sign foundations were created and shared with the technical oversight committee. Also shared with the committee were results of numerical models of the sign foundations. On March 3, 2014, the research team had a conference call with the technical oversight committee to discuss the sign foundation model and engineering plans. The model and plans were subsequently updated to include a higher point of load application above the pile caps. The engineering plans are now in the final stages and are being discussed with the construction subcontractor, Boone Construction Co. Progress was also made securing other details of the testing, including quotes for instrumentation and hydraulic equipment for load application.

## Anticipated work next quarter:

Work in the upcoming quarter will include construction of the test foundations and most likely conducting the test. Plans will be finalized with the contractor before setting a construction schedule. Instrumentation and data acquisition supplies will be prepared to coincide with the construction schedule. After the concrete for the piles caps has cured sufficiently, the test will be performed.

## Circumstances affecting project or budget:

Currently, work on the project is underway and is being performed consistent with the research plan and project budget.

## Attach / insert Gantt chart and other project documentation

The Gantt chart from the research plan is included below. Currently the research team is working on Tasks 1 and 2. The literature review of Task 1 is nearly complete, and the research team is wrapping up the planning phases of the field research of Task 2. The project is on schedule, consistent with the Gantt chart.

	Project Month																	
Task	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1. Literature Review																		
2. Field Research																		
3. Data Analysis																		
4. Final Report																		
						Draft Fin	al Repo	rt Submi	ted Octo	ber 31, 2	2014							
WisDOT Review																		
Report Revisions &																		
Final Submittal																		
						Final Fin	al Repo	rt Submi	ted Jan	uary 31, 2	2015							

## FOR WISDOT USE ONLY

Staff receiving QPR:	Date received:
Staff approving QPR:	Date approved: